

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (CURRENTLY AMENDED) A tire tread wear forecasting method comprising:
causing a tire to come into contact with, and to be run on, a road surface,
measuring an increase in temperature of a tread surface part of the tire or a temperature of
a tread surface part after increasing the temperature of the tread surface part, ~~and~~
forecasting tire tread wear on the tire based on the increase in temperature of the tread
surface part of the tire or based on the temperature of the tread surface part after increasing the
temperature of the tread surface part, and
forecasting the tire wear based on a temperature differential calculated by subtracting the
temperature of the tread surface part before the tire is rotated from the temperature of the tread
surface part after rotation begins.

2. (ORIGINAL) The tire wear forecasting method of Claim 1, comprising measuring the
temperature of the tread surface part during an interval when, compared to the temperature of a
groove in the tread, the temperature of the tread surface part is higher.

3. (ORIGINAL) The tire wear forecasting method of Claim 1, comprising measuring the
temperature within 90 seconds after the tire is started running.

4. (ORIGINAL) The tire wear forecasting method of Claim 1, wherein the temperature of the tread surface part, before the tire starts running, is lower than the temperature of the road surface.

5. (ORIGINAL) The tire wear forecasting method of Claim 4, comprising cooling the tire before running it so that the temperature of the tread surface part is lower than the temperature of the road surface.

6. (ORIGINAL) The tire wear forecasting method of Claim 4, comprising heating the road surface so that the temperature of the road surface is higher than the temperature of the tread surface part.

7. (ORIGINAL) The tire wear forecasting method of Claim 1, comprising correcting a measured temperature of the tread surface part based on a length of a tire contact surface.

8. (CANCELED)

9. (ORIGINAL) The tire wear forecasting method of Claim 1, comprising measuring the temperature of the tread surface part using a non-contact radiant thermometer.

10. (ORIGINAL) The tire wear forecasting method of Claim 9, wherein the non-contact radiant thermometer is a thermography machine.

11. (CANCELED)

12. (PREVIOUSLY PRESENTED) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature,

means for forecasting tread wear based on information from said measuring means, and

a memory device for recording multiple temperature measurement results, and

a calculating device for calculating temperature differences of the temperature measurement results from a first temperature measurement and the temperature measurement results from a second temperature measurement at temperature measurement locations.

13. (CURRENTLY AMENDED) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part wherein the temperature of the tire tread surface before running is different from the temperature of the road surface, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature,

means for forecasting tread wear based on information from said measuring means,

an inputter that inputs a length of a tire contact surface; and

a compensator that corrects at least the measured temperature based on the length of the tire contact surface that has been input by the inputter.

14. (CANCELED)

15. (PREVIOUSLY PRESENTED) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in

contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature, and

means for forecasting tread wear based on information from said measuring means, and

means for cooling the tire.

16. (PREVIOUSLY PRESENTED) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature, and

means for forecasting tread wear based on information from said measuring means, and
means for heating the road surface.

17. (CURRENTLY AMENDED) A tire wear forecasting method comprising:
contacting and running a tire on a surface;
measuring a temperature of the tire or an increase in the temperature of the tire a predetermined period of time after said running step is started; and
forecasting wear on the tire based on a result of said measuring step,
wherein said forecasting step comprises forecasting a relative amount of wear and a location of the wear on a tread surface of the tire.

18. (CANCELED)

19. (CANCELED)

20. (CANCELED)